

RECORDS ^{OF} THE PAST

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THE UNIVERSITY OF PENNSYLVANIA'S EXPEDITION TO BABYLONIA

EXPLORATION OF NIPPUR*

BY THE REV. JOHN P. PETERS, PH.D., D.D.

THE first American expedition to Babylonia, under the control of the American Institute of Archæology, and led by Dr. William Hayes Ward (called the Wolfe Expedition, because its expenses were paid by the late Miss Catherine Lorillard Wolfe of New York), was sent out in 1885 to explore the country, and report on the possibilities of excavation and the places where excavations should be conducted. It was my good fortune to secure the funds for this expedition, and after its return I endeavored to secure the means to follow up Dr. Ward's work by actual excavations in Babylonia, but interest seemed to lag, and it was not until 1887 that I was able to accomplish anything further. In the summer of that year I chanced to meet Mr. E. W. Clark, a banker of Philadelphia, who at once interested himself in the good cause. He and his brother, Mr. Clarence H. Clark, Mr. W. W. Frazier and other Philadelphia gentlemen agreed to con-

*I have been asked to prepare for RECORDS OF THE PAST an account of the conception and organization of the work at Nippur, and, in general, of the results of that work during the time I was director of the expedition. This ground is already covered much more in detail in my work entitled *Nippur; or Explorations and Adventures on the Euphrates*, Putnam's 1897. To this work I refer those who wish to read the story in greater detail.



John P. Peters.

tribute toward an expedition to Babylonia, of which I was to be director. It was proposed to the University of Pennsylvania to make this expedition the University of Pennsylvania Expedition to Babylonia, on condition that the University should provide a fire-proof building for the reception of any objects which might be secured. This condition was accepted, and Dr. William Pepper, then Provost of the University, was made President of the Committee.

Our original plans were very simple. I had intended to take with me only one other person, but, as applications for positions on the expedition came in and interest in the work was aroused, it was decided to change the original plan and increase the staff. Mr. J. D. Prince, now a professor in Columbia University, was accepted as a volunteer, paying his own expenses, and given the position of secretary to the director. Mr. R. F. Harper, now a professor in the University of Chicago, then an instructor at Yale, was made assyriologist, and Mr. Perez Hastings Field, formerly of Columbia, then at *L'Ecole de Beaux Arts* in Paris, was appointed architect and engineer. Mr. John Henry Haynes, who had been on the Wolfe expedition, was selected for the position of business manager and photographer, and Mr. Daniel Noorian, who had been with Dr. Ward on the Wolfe expedition, as an interpreter and director of diggings. Later, Prof. H. V. Hilprecht of the University of Pennsylvania was added as a second assyriologist.

This expedition left the country in the summer of 1888, but many months elapsed before permission to excavate could be obtained from the Turkish Government, and it was not until December of that year that the party started from Aleppo for Bagdad. We had the good fortune to discover on our way down the Euphrates the site of the ancient Thapsacus or Tiphseh. At Bagdad further delays were interposed by the Turkish authorities, and it was not until February 6, 1889, that excavations actually commenced on the mounds of Nufar, the ancient Nippur. At the end of a little more than 2 months our work was brought to a tragic close. One of the *zaptiehs*, or *gens d'armes* assigned to us as a guard by the Turkish Government shot and killed an Arab of the neighboring Es-Sa'id tribe, who was trying to steal our horses and mules. It was with great difficulty that we and our Turkish guards were able to escape from the country alive. Our camp and half our horses were burned, and we were robbed of \$1000 or more in gold. Fortunately, such objects as we had found in the first year's campaign we were able to carry with us to Bagdad. All the members of the expedition at once handed me their resignations or sent the same to the Committee in Philadelphia. It must be frankly confessed that up to this point the expedition was not a success. We had the good fortune to purchase some collections of antiquities in London and Bagdad; but the objects found by us at Nippur were not numerous nor of very great importance.

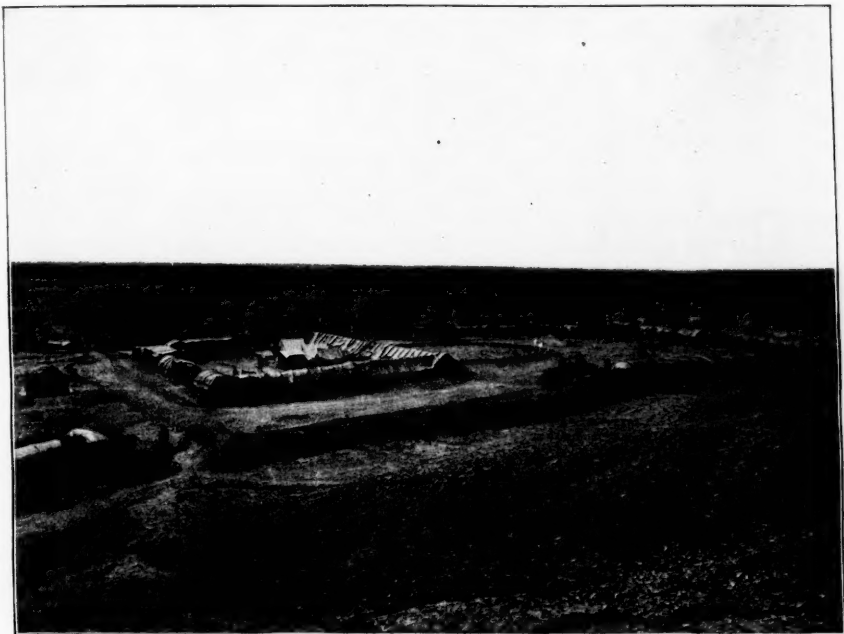
I returned to America to report to the Committee. The judgment of the members of the expedition, as contained in letters to the Committee, was not favorable to the continuance of excavations at Nippur. My judgment was that we should continue the work at Nippur, and the Committee directed me to return and resume excavations there, provided that, within a reasonable time, I could arrange with the Turkish Government to return to the place; otherwise, I was to close up matters and bring the Expedition to an end. It was with great difficulty and only after considerable delay that the Turks consented to my return, and even after the obstacles at Constanti-

nople had been overcome, difficulties were placed in my way by the local officials. For the second campaign I engaged in the same positions as before Mr. Haynes, who had remained at Bagdad as Consul, and Mr. Noorian, who had remained with him. Later I secured the services for a month or two of an engineer, Coloman d'Emey, a Hungarian by birth. I had with me also in the second year, a precaution due to the outbreak of cholera in Babylonia, a physician, a graduate of the American College in Beirut, Dr. Selim Aftimus. It had been arranged that, in addition to his medical duties, Dr. Aftimus should make natural history collections. Unfortunately he was taken ill with typhoid on the day of our arrival at Nippur, and was with great difficulty returned to Bagdad alive.

Our excavations in the second year lasted about 4 months, and we employed an average of more than twice as many men as we had done in the first year. Naturally also, the knowledge and experience obtained in the first campaign enabled us to make our work much more efficient than we had done in the first year. In the mere amount of cubic feet excavated, the second year's work was very many times larger than that of the first year; and our success in finding antiquities was as pronounced in the second campaign as our lack of success had been in the first. It is estimated that some 8,000 inscribed objects were found in this campaign, including the oldest Babylonian inscriptions theretofore discovered anywhere. The extent of the mounds was so vast that a considerable portion of our digging was necessarily of an unsystematic character, rather of the nature of tentative exploration. By far the largest excavations were conducted on the site of the ancient temple of Bel-Enlil. The discovery on the southeast side of the *ziggurat*, or stage tower of that temple (*E-kur*, or Mountain House, by name), in a deep boring, of a vase bearing in very archaic characters the name of a king, Alusharshid or Urmush, then quite unknown, led me to commence systematic explorations at that point, removing the earth over a large section layer by layer, so that we might follow the strata. But so great was the amount of material to be removed that I succeeded in reaching the virgin soil at only one place. The development and extension of this work of systematic excavation was to be left to my successors. I do not mean that this was the only trench in which the ruins were carefully excavated layer by layer. The greatest care was exercised everywhere in the exact location of objects found and the determination of the archaeological stratification of the mounds. Further a number of trenches were undertaken at various parts of the huge mounds, which were carried down to a great depth, the earth being removed layer by layer, but none of these yielded such results as to lead us to extend the trenches to undertake the complete excavation of those parts of the mounds.

Haynes left Nippur in April 1890. Noorian and I remained a month longer, until May, and then made a journey of exploration southward, which lasted another month, for the purpose of examining various other ruins. We had the good fortune to bring back from this expedition a number of valuable inscriptions and some important information.

It was a year before the objects found in the second campaign were delivered at Constantinople. In the meantime the home Committee made a continuance of work dependent upon obtaining such a portion of the objects found as should, to some extent, compensate them for the large outlay of money incurred. After the objects reached Constantinople, in the spring of 1891, I was sent back to negotiate with the Turkish authorities



OUR CAMP ON THE PLAIN SOUTHEAST OF NIPPUR, SECOND YEAR

for a partition and also to examine and study more carefully the objects excavated, securing photographs and squeezes of anything of value which should remain at Constantinople. This was a work of some months, occupying the summer and autumn of 1891. Ultimately the Turkish Government made a very handsome donation of objects found. This gift was announced as given to me personally, on account of my services, the risk and danger which I had undergone, etc. As later donations have been made to Professor Hilprecht in similar terms, it would almost seem that this is a set form used in such gifts of antiquities made by the Turkish Government, in order not to establish a precedent of giving to institutions or organizations conducting excavations a portion of the objects found.

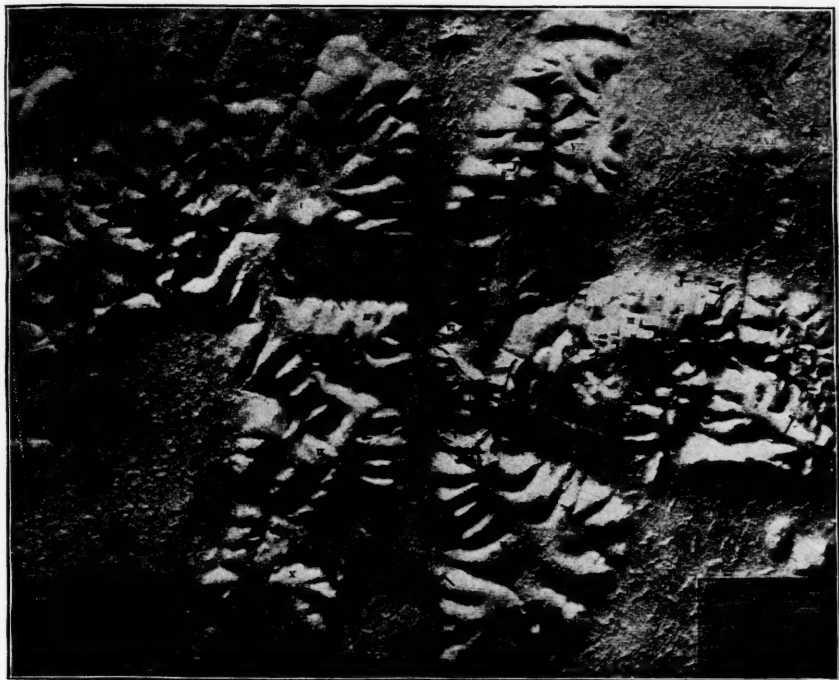
It was the winter of 1891 before the objects found in the excavations of 1889 and 1890 finally reached Philadelphia. This long delay so discouraged the home Committee, that it was some time before steps were taken to resume the work at Nippur. Finally, in 1893, Mr. Haynes, who had in the meantime resigned his consulate at Bagdad and returned to this country, was sent out to conduct another campaign in the field. The arrangement made was that Mr. Haynes should report directly to me and receive his instructions through me. The plan of excavations which I drew up and which Mr. Haynes in general followed, provided for the continuance of the systematic excavations of the Temple begun by me. At the same time he was to continue and enlarge the work in those mounds in which we had found any considerable number of inscribed tablets, and excavate more fully at two places where we had discovered buildings which seemed to be of some importance.

Mr. Haynes went out alone, but was afterward joined by Mr. Meyer. The latter died in the field, and during the greater part of the 3 years' work of the second expedition Mr. Haynes was entirely alone. As a result of my experience in Babylonia, I had recommended to the Committee that excavations should be conducted summer and winter alike. Mr. Haynes had seconded this recommendation and his was the first continuous excavation ever conducted in Babylonia, winter and summer. It was certainly a very trying, difficult and even dangerous task. He was eminently successful in the discovery of objects, especially inscribed objects, of great antiquity. Professor Hilprecht estimated these objects as numbering 30,000 or more.

In 1898 Mr., now Dr. Haynes, was again sent out by the Committee. Of the details of this third expedition I cannot speak with exactness, as I ceased at that time to be a member of the Committee. In 1900 Dr. Hilprecht was sent out to bring the excavations to a close. He arrived just as Haynes had discovered on the hill south of the temple, in which we had previously found a large number of tablets, the great deposit of tablets which has been announced as the "Temple Library." Thus Professor Hilprecht, who had been 2 months with the expedition to Nippur in the first unsuccessful year, had the great good fortune in the 2½ months which he spent at Nippur at the end of Haynes' last expedition, to see the mounds which had proved so recalcitrant before yield precious tablets by the thousand.

Such in brief is a summary of the history of the work in the field. I have of necessity passed over the home work, the work of publication, and the work done by Dr. Hilprecht in Constantinople, in cataloguing and studying the objects found by Haynes and securing a favorable partition from the Turkish Government.

And now as to the results of this expedition:—The excavation of the Temple of Bêl, although not yet complete, has given us a very fair idea at least of the character and construction of an ancient Babylonian temple, with its elevated platform on which stands a ziggurat, its courts, chambers and the like. We have also obtained a better idea of the relation of the Temple to the community life than was possessed before and of the history of the growth and origin of Babylonian temples and the influence of those temples on the Hebrews and other Semitic peoples. Incidentally our excavations have thrown light on the Babylonian religion and Semitic religion in general. The inscriptions found in the excavation of the temple, and in the excavations in other parts of the City, have enabled us to write a fairly consecutive history of this most important temple and of the City itself from a period about 3,000 to 3,500 B.C. (according to some about 4,000 to 4,500 B.C.) onward; and the history of Nippur has naturally thrown much light on the history of Babylonia as a whole and of the civilization which originated in or was propagated from the Tigris and Euphrates valley during the same period, the more especially as Nippur was the most ancient and important sacred city of Babylonia. The excavations at Nippur did, in fact, carry back our knowledge of the culture and life of this region 1,000 or 2,000 years. We found the names and inscriptions of kings hitherto unknown. We restored to history, if I may so say, Sargon the First of Agade (oddly enough, at the very time that we were excavating the inscribed door-sockets of this king, Hugo Winckler of Berlin was publishing a book in which he declared that Sargon was a myth), and showed that, so far from standing at the beginning of Babylonian history, Sargon in reality



FROM A CAST OF THE MOUNDS OF NIPPUR BY MURET, OF PARIS, FROM THE PLANS OF MR. FIELD
AT THE CLOSE OF THE FIRST YEAR'S WORK



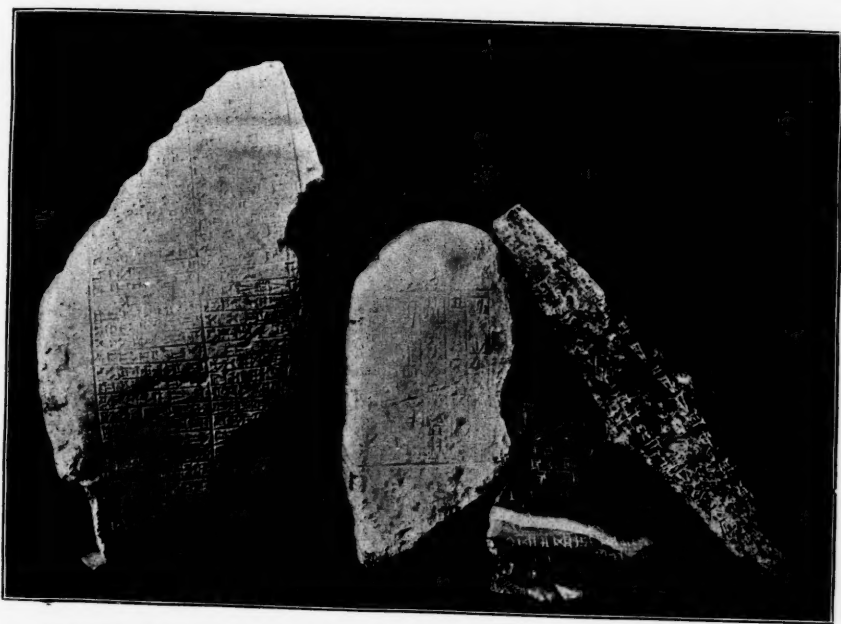
EXCAVATIONS ON TEMPLE HILL, SECOND YEAR. THE VISIBLE WALLS ARE THE REMAINS OF THE
SELEUCIDAN CITY



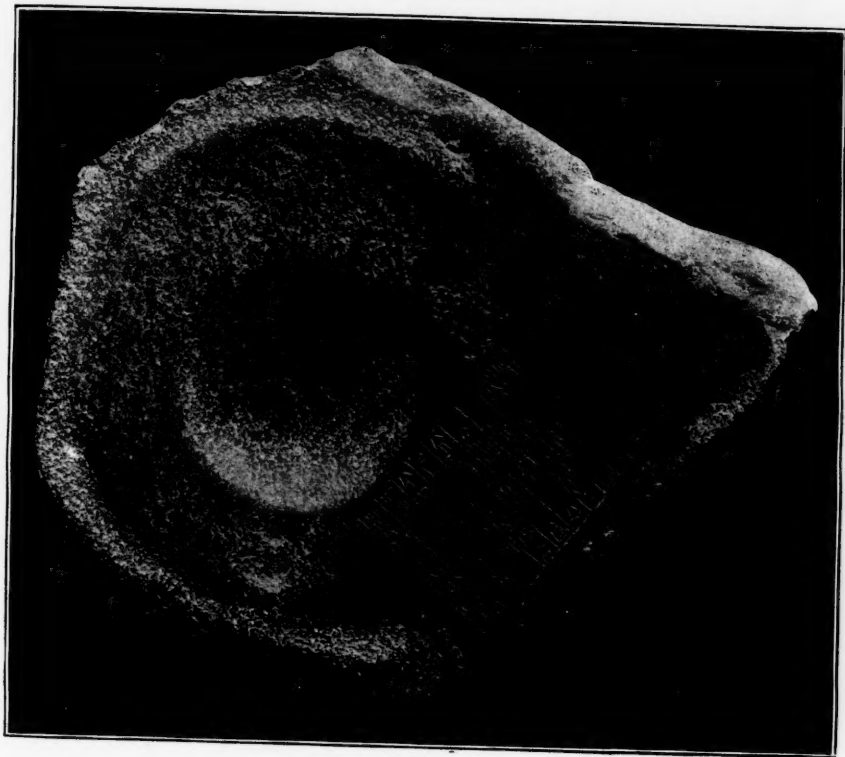
1 AND 6. CLAY FIGURES OF BEL-ENLIL, C. 2,500 B.C.; 2. EGYPTIAN FIGURINE IN GREEN PASTE; 3. GREEK TERRA COTTA, COLORED; 4. FIGURE OF A DOG; 5. OBSCENE FIGURINE



SHOW CASE AND MEDICINE JARS (?) FROM JEWISH APOTHECARY (?) C. 600 A.D.



INSCRIBED OBJECTS OF CASSITE PERIOD, C. 1,400 B.C., LAPIS LAZULI, AGATE AND FELDSPAR

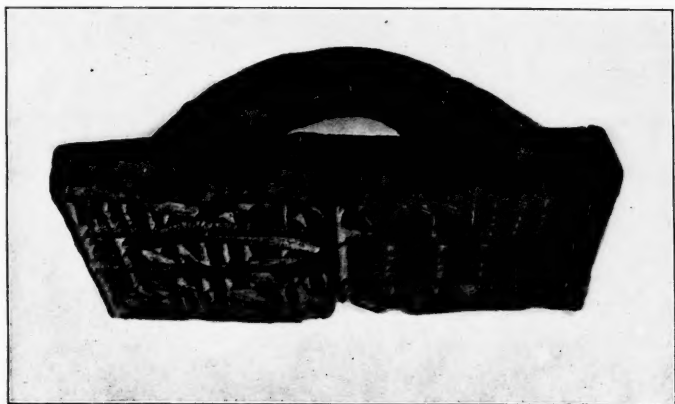


DOOR-SOCKET OF SARGON I, KING OF AGADE

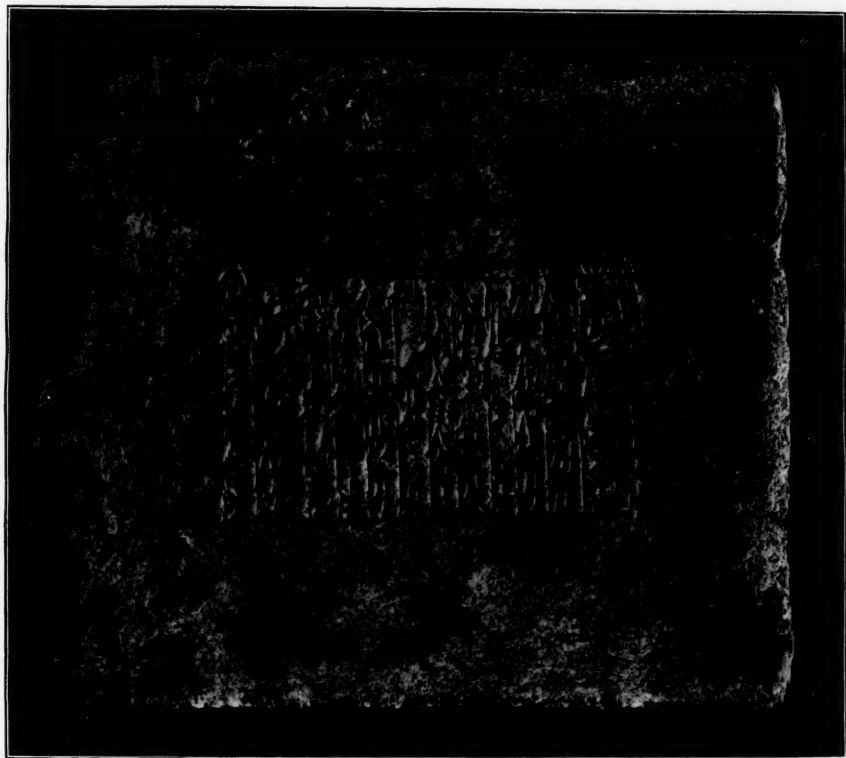
stood nearer the middle; in the excavations on the temple mound, his remains were found about half-way down. With regard to the date of this king, it is worthy of note, by the way, that the evidence from the excavations at Nippur tends to discredit the traditional date of 3,800 B.C. His remains and those of his son, Naram Sin, were found immediately superimposed upon those of Ur Gur, king of Ur, to whom is commonly assigned a date between 2,700 and 3,000 B.C.

The inscriptions found in the temple mound, belonging, as said above, to kings whose names were heretofore unknown, such as Alusharshid or Urmush, Lugal-Kigubnidudu, Lugal-Zaggisi, ante-date Sargon by an uncertain time, a time which we can only conjecture from the palæographic evidence and the difference of strata. But before the earliest of these inscriptions a civilized, city-building people inhabited this site, and the same temple site was the central place of their worship of the deity. From the excavations at Nippur and from other considerations, it has seemed to me that we must ascribe the foundation of this City and temple to a period not later than the VII Millennium B.C.

Of the relation of the worshiper to the gods we found some curious evidences in votive tablets, votive vases and various other votive objects of different and often peculiar forms and shapes. We found also evidences of the use of statuary in connection with the Temple, as at the ancient Shirpurla, and of an art history resembling that of Shirpurla. The destruction of these objects of art, for they were all found in fragments, and the destruction which befell the temple at various periods, are land-marks of wars and invasions. One most curious little "find" will illustrate the side-lights which our discoveries threw on the culture and commercial relations of the very ancient world outside of Babylonia. In one room of the ruins of a building in front of the Temple and close to its great southeastern entrance, a wooden box, some 3 feet square, had contained a variety of votives, some complete, some in the course of manufacture, and in addition material for the manufacture of other similar objects. Among these were a number of inscribed glass axes colored with cobalt, which cobalt must have come from China, a quantity of lapis-lazuli from Bactria and magnesite from the Island of Eubœa, thus revealing a commercial intercourse in the XIV Century B.C., extending from China on the east to the Ægean Islands on the west. The glass we know was highly prized and used in royal presents, such as were interchanged between Babylonia and Egypt. The same may have been true of the magnesite, most of which had been manufactured **into votives** of knob-like and columnar shapes, never found before. (More recently votives of this shape have been found by de Morgan in Susa.) There was also, among other objects in the box, an agate votive, which contained on one side an inscription to Ishtar of Erech by Dungi, king of Ur, and on the other an inscription of Kurigalzu II, king of Karduniash. According to the latter, Kurigalzu had found this tablet in the land of Elam, into which he had evidently conducted a successful expedition, and brought it back and dedicated it to Beltis at the Temple of Bel-Enlil. The time intervening between the two inscriptions is about 1,500 years, and the little agate tablet bears witness to the hostile relations existing between Elam and the Babylonian cities, which extended to the plundering of temples. Tablets found in other parts of the mounds have thrown considerable light on the chronology and general conditions of what is known as the Cassite period, occupying the greater part of the II Millennium B.C.,



BRICK STAMP OF SARGON I, KING OF AGADE



BRICK, ABOUT A FOOT SQUARE, OF ISHME-DAGAN, KING OF ISIN, C. 2,500 B.C. FROM TEMPLE OF BEL-ENLIL

as to which, we had before this very little information. Large numbers of tablets were found also from the period of the supremacy of Ur, in the III Millennium B.C. These reveal the relation of the Temple to the industrial and commercial life of the community, showing us the Temple as a great land-holder, a possessor of flocks and herds and other properties. Up to the present time nothing of direct historical or literary importance has been found in these inscriptions, but much that is valuable for chronology and that throws light on the actual life and customs of the people.

Besides the inscriptions there are, of course, a vast number of uninscribed objects, pottery, stone and metal utensils, etc., which throw light on the manners and customs of the people and reveal, in a general way, the conditions of civilization at all periods of the City's history. The study of these objects has not yet been so carried out as to give us a history of the progression of manufacture, nor can we yet tell with any certainty from the examination of a piece of pottery the period to which it belongs. In point of fact, the greater part of the pottery found at Nippur has been of a rude description, revealing much the same conditions from the earliest period onward. There are, however, some forms of pottery with a peculiar glaze or of a peculiar manufacture, presenting sufficiently characteristic marks to enable us to determine their period at a glance. The same is true of certain manufactures of bronze.

The investigation of a large number of graves has revealed to us, also, the burial customs from certainly 2,500 B.C. onward. In view of recent discoveries in Palestine it is interesting to note that in earlier times the object in interment was to put the whole body in some receptacle, an urn, a jar or a piece of pottery especially constructed for receiving the remains of the dead, but that no effort was made to preserve the body intact. From this form of interment, which prevailed also in the earliest Semitic burials in Palestine, we progressed steadily at Nippur to a reverent care for the body of the dead and the endeavor to preserve it intact, at least among the more wealthy classes. In the burials at Nippur, also, we found no period of cremation. From the outset burial is by interment, although food and other objects which are placed by or about the dead may be burned. This again is interesting, in view of recent discoveries in Palestine, where, while the pre-Semitic inhabitants made use of cremation, the Semitic method of disposal of the dead was from the outset, by interment.

It must be understood that this summary covers fully only the results of the excavations conducted by me on the field in the first 2 years, with the partial use of the excavations of Dr. Haynes in the first of the two expeditions in which he was field director. There has been as yet no publication of the results of Dr. Haynes' work in either of the two expeditions which he conducted. Public announcement was made of the publication of the narrative of the first expedition by Wattles & Co., of Philadelphia, but later the announcement was withdrawn and no information has since been furnished with regard to the proposed publication. It is very much to be regretted that the University of Pennsylvania has not seen its way to a speedy publication of results, after the method of the Egyptian Exploration Fund or of de Morgan's expedition in Persia, or of regular periodical publications, like those issued by the present German Expedition to Babylon, or the Palestine Exploration Fund. Such publication would be of great value to the scientific world and of much interest to the public.

PROFESSOR HILPRECHT'S RECENT EXCAVATIONS AT NIPPUR*

BY PROF. ALBERT T. CLAY, PH.D.

Assistant Curator of Babylonian Antiquities, University of Pennsylvania

ONE of the most important contributions to Archæology is Prof. Hilprecht's "Explorations in Bible Lands," which has just appeared. The author in the preparation of his volume has had the co-operation of well known, leading scholars of German Universities with a view of presenting the vast material authoritatively, and yet in a popular form, to meet the great demand for a reliable work on the subject for Bible scholars as well as students of ancient history. The leading part of the work, which is really a volume within a volume, is by Professor Hilprecht on *The Resurrection of Assyria and Babylonia*. This is followed by the section on *Palestine*, written by Dr. Benzinger, formerly of the University of Berlin; *Egypt*, by Professor Steindorff, of the University of Leipzig; *Arabia*, by Professor Hommel, of the University of Munich; and the *Hittites*, by Professor Jensen, University of Marburg.

The volume gives the first complete history of the epoch-making results of the Babylonian expedition of the University, by its scientific director, Professor Hilprecht. This is the special feature of the work, as here for the first time is presented a thorough treatment of all the many important discoveries made at Nippur in connection with the excavations of the great Temple of Bêl and its storied-tower; the Temple Library, with its educational and literary quarters; the walls and gates of the city, its palaces and business houses.

The first expedition was organized largely through the instrumentality of Professor J. P. Peters, who was ably supported by the former Provost, Dr. William Pepper, and by Provost Harrison, Mr. E. W. Clark, Mr. C. H. Clark, Mr. W. W. Frazier and other influential citizens of Philadelphia. Professor Peters was the director of the first and second expeditions. Professor Hilprecht and Professor Harper were the Assyriologists of the first expedition and Mr. Field accompanied it as architect. Dr. J. H. Haynes, who had been business manager of the first campaign, accompanied Dr. Peters in a like capacity in the second campaign, but the latter had with him neither an assyriologist nor architect. The two expeditions conducted by Dr. Peters were engaged in excavating for 2 months and 9 days and 3 months and 11 days respectively. Dr. Haynes was field director of the third expedition, and was assisted for a short while by Joseph H. Meyer, an architect of the Massachusetts Institute of Technology. He remained at the mounds of Nippur for nearly 3 years continuously. The staff of the fourth and last expedition consisted of Professor Hilprecht as scientific director, Dr. Haynes as field director, and Mr. C. S. Fisher and H. V. Geere, architects. This expedition remained in the field about 16 months during the latter part of which time, when Professor Hilprecht directed the work in person, most of the important and epoch-making results were obtained.

**Explorations in Bible Lands During the Nineteenth Century*. Edited by Prof. H. V. Hilprecht, Ph.D., D.D., LL.D. Babylonian Section. University of Pennsylvania. Illustrated. Octavo, pp. 893.

Professor Hilprecht was therefore at the ruins of Nippur only on the first and last campaigns. But while his labors on the mounds were thus limited to a short time, it was through his accomplishments from the very beginning of the excavations that they have become so renowned throughout the world. His determination of the different antiquities; his decipherment of the inscriptions and his restoration of the early history of Babylonia have made his name familiar to almost every intelligent person of this decade. While others used the spade they were largely dependent upon Professor Hilprecht for the interpretation of what they had discovered. It was through his sacrificing labors, summer after summer in Constantinople, in the interests of the Turkish Museum, classifying and deciphering the material deposited there, that the collections of the University of Pennsylvania were enriched by many thousands of antiquities, which were presented to Professor Hilprecht, because he declined the liberal remuneration offered him for his services by the Turkish Government.

The excavations conducted prior to Professor Hilprecht's arrival at Nippur on the last campaign were characterized by the number of cubic feet of debris removed and the number of valuable antiquities discovered. It was frequently impossible to combine the details of the discoveries given, and to obtain even a moderately accurate idea of what was going on, so that the Committee in Philadelphia urged Professor Hilprecht to go to Nippur and superintend the work in person. It was not until the middle of November, 1899, after he had finished the organization of the Semitic Section of the University Archaeological Museum, that he could leave for the East for the purpose of taking charge of the work.

In this work by Professor Hilprecht a very complete and satisfactory account of the many discoveries is given. Through his recent investigations in the trenches and his decipherment of the inscriptions discovered the reader of this important contribution to Archaeology is impressed with the fact that practically everything heretofore published concerning the architectural features and the true significance of the Babylonia temple, etc., must be changed. Among some of the most important of Professor Hilprecht's recent achievements are the following:

PARTHIAN FORTRESS

On the first campaign when the excavators were digging in the upper stratum they came upon a large structure, the striking features of which were immense buttresses and two round towers. Professor Hilprecht's colleagues failed to agree with him when he determined it to be a fortress of the late period built upon the temple. They declared it to be a late restoration of the temple itself. Professor Hilprecht now proves that his former view was correct, and that in the Parthian period some foreign people built upon the old temple of Bêl and its storied tower a large fortress. Most important antiquities were discovered in some of its chambers built into its walls. The architect of the last expedition offers a very satisfactory plan of nearly the entire building. The dump heaps, however, raised upon part of its ruins were so high that the complete excavation of this fortress had to be deferred.

TEMPLE OF BEL

A very important fact was determined in connection with the temple excavations. "The stage-tower did not occupy the central part of the tem-



M. V. Kilgus

ple court," and while it was the most prominent feature of the temple area, it was not the temple proper as others had inferred. An extensive structure alongside of the ziggurrat, covering an area almost as great in extent, represented the "house of Bêl" itself. In other words, the wall of the inner court of the temple Ekur inclosed besides the ziggurrat, the temple proper, "where sacrifices were offered and the most valuable votive offerings of the greatest Babylonian monarchs deposited." This building at the side of the ziggurrat existed as early as the time of Sargon I [3,800 B.C.] and Naram-Sin [3,700 B.C.]. From the inscribed and sculptured objects found in proximity to its sacred precincts, "an idea of the elaborate manner in which the temple of Bêl was equipped and embellished in early days" can be formed. Dump heaps also placed upon this structure by Professor Hilprecht's predecessors prevented him from examining little more than part of the walls of the building in the time at his disposal.

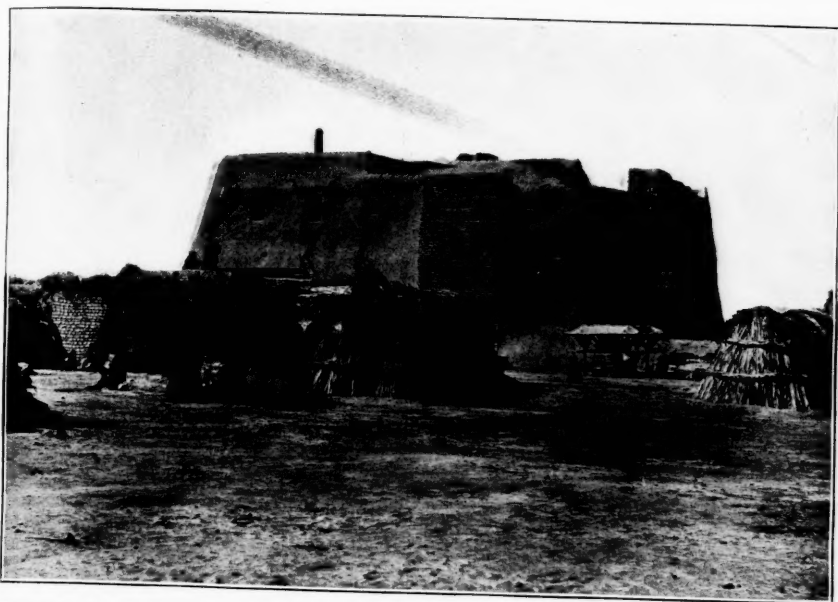
Adjoining the court of the ziggurrat and temple proper, Professor Hilprecht found sufficient evidence to show that a somewhat smaller, or outer court existed, where Dr. Peters in the early part of the excavations had discovered a little sanctuary. The bricks used in its construction were stamped with the titles of Bur-Sin. From a tablet found in a little museum or collection of antiquities belonging to an archaeologist of Belshazzar's day (see below), Professor Hilprecht "learned that besides Bêl, at least 24 different other deities had their own 'houses' in the sacred precincts of Nippur." These the latter thinks should "be sought for in the outer court of Ekur."

ZIGGURRAT IMGARSAG

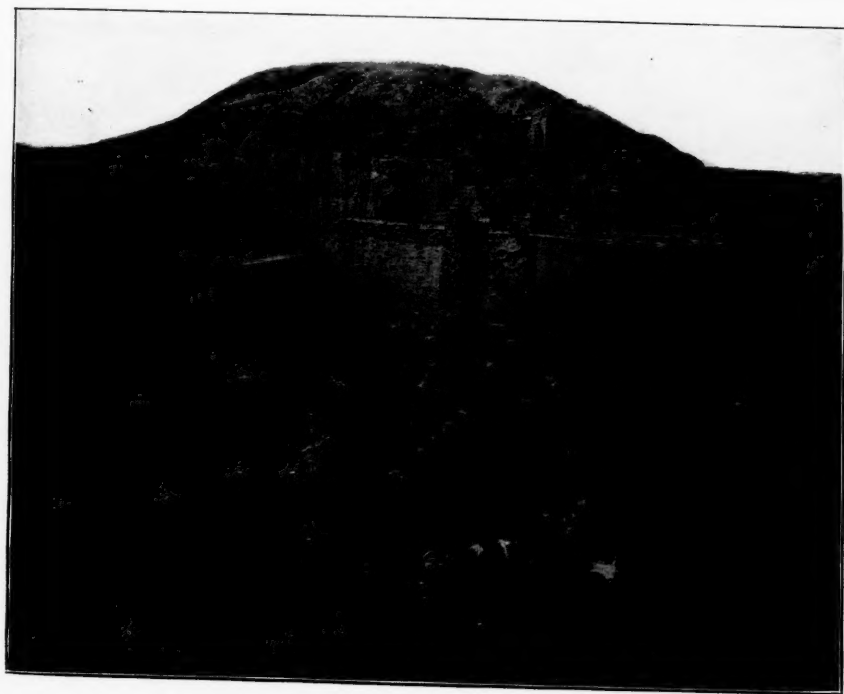
The determination of the character of the storied-tower of Babylonian temples is another of Professor Hilprecht's recent accomplishments. Every temple, practically, had its tower. The *ziggurrat Babili* at Babylon was the Tower of Babel. Contrary to the view in the first place that these storied-towers of the various temples of the land had been introduced by Ur-Gur, 2,700 B.C., Professor Hilprecht has shown that they had their origin in the early Sumerian period, prior to 4,000 B.C. Four feet behind Ur-Gur's facing wall of the Nippur tower were found the bricks characteristic of the period of Naram-Sin [c. 3,750 B.C.]. Ten feet within the latter was found the smooth and plastered surface of a pre-Sargonic ziggurrat recognized as belonging to that early period by its peculiar crude bricks. This formed the kernel for the later construction.

SUMERIAN CREMATIONS

A most important fact was determined by Professor Hilprecht in connection with what he found in the lower strata around the early ziggurrat, extending even beneath the construction of Naram-Sin. Everywhere were seen masses of fragments of pottery intermingled with ashes. The latter were the remains of bones and wood consumed by fire. Taken into consideration with the many beds of ashes reported by Haynes, the field director of the expedition, and also the results of the excavations at El-Hibba and Surgul, where Koldewey had found fire necropolises, Professor Hilprecht's investigations led him to the conclusion that the ancient Sumerians who occupied Nippur prior to the Semitic invasion also cremated their dead. "The thousands of urns discovered, as a rule badly crushed, but in some cases well preserved, are funeral vases, in which the ashes and bones



CASTLE BUILT BY EXCAVATORS FOR LIVING QUARTERS AND THE STORAGE OF RECOVERED ANTIQUITIES



EXCAVATIONS IN THE TEMPLE COURT TO VIRGIN SOIL

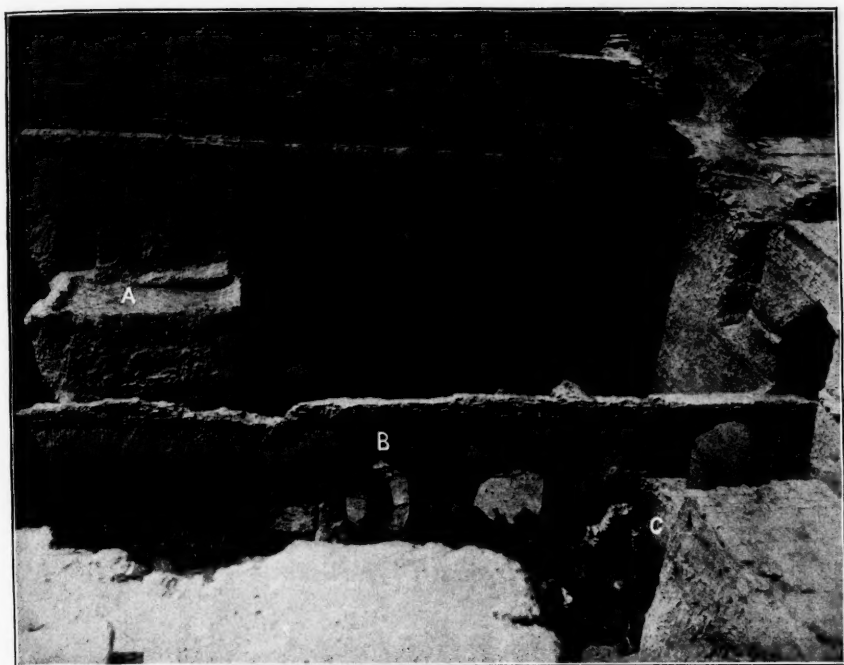
left after the cremation, together with objects once dear to the person, besides food and drink, were placed and buried." Haynes, during the third campaign, reported the discovery of an immense altar 14 by 8 feet, upon which were found several inches of ashes. This Professor Hilprecht now suggests was "one of the crematoriums on which the bodies of the dead were reduced to ashes."

The situation of these ash graves within the sacred inclosure and around the base of the ziggurat—a position similar to that of the ash graves found by Koldewey at El-Hibba—led Professor Hilprecht to connect these burials with the ziggurat itself. He, therefore, asks: "Were these stage-towers, like the step pyramids of Medum and Saqqara in Egypt in certain cases perhaps only especially important tombs?"

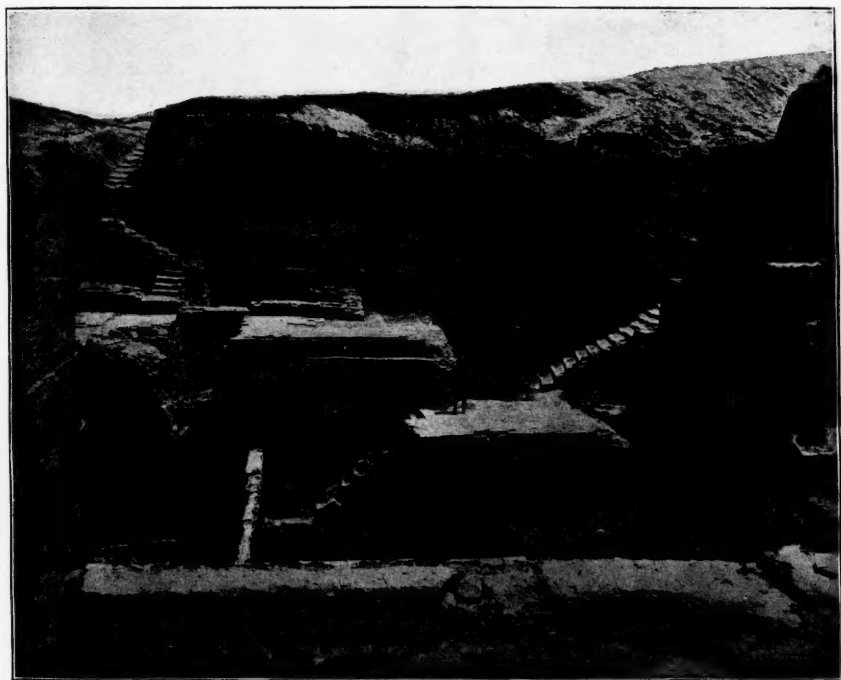
Two names for the stage-tower of Nippur have been known for some time: *Imgarsag*, "Mountain of the wind," and *E-sagash*, "House of the decision." On the recent campaign two inscriptions were discovered which when translated revealed to Professor Hilprecht two additional names for the ziggurat: *E-gigunu*, "House of the tomb," and *Dur-anki*, "Link of heaven and earth." Professor Hilprecht asks: "How was it possible that the ziggurat of Nippur, which constitutes the most prominent part of the whole temple complex, this huge towering terrace, which 'connected heaven and earth,' could appear to the Babylonians as 'the house of the tomb' at the same time?"

"Most of the names of Babylonian temples express a cosmic idea." Anu was god of the upper or heavenly ocean, Bêl's sphere of influence embraced the world, and Ea's region was the under world or the terrestrial ocean. Bêl's region was not only between that of Anu and Ea, but it practically included them. The ziggurat of Bêl, or "the link of heaven and earth" is the "local representation of the great mythological 'mountain of the world,' *Harsagkurkura*, a structure the summit of which reaches into heaven [compare the story of Babel, Gen. 11 : 4], and the foundation of which is laid in the clear apsu, *i. e.*, in the clear waters of the subterranean ocean." On the one hand the shrine in which Bêl and his consort Bêltis resided "stood on the top of the ziggurat," and was a "heavenly as well as terrestrial residence at the same time," and on the other hand, the foundation descended to *urugal*, "the great city," or *Arâlu*, "the abode of the dead," which "lies directly below and within the earth." "As *gigunû* 'grave,' 'tomb' is used metonymically as a synonym of *Arâlu*, it follows that the ziggurat of Nippur, which is the local representation of the great mountain of the world, also could be called 'the house of the tomb' (*E-gigunu*). It was, therefore, only natural that the earliest inhabitants should bury their dead around the base of the ziggurat, so that the latter appears to us almost like a huge sepulchral monument erected over the tombs of the ancient Sumerians who rest in its shadow." Professor Hilprecht further shows that the conception of the classical writers concerning the ziggurat Babili as 'the sepulchre of Bêl' is correct and goes back to trustworthy original sources. The temple of Bêl therefore, "appears to us as a place of residence for the gods, as a place of worship for man, and as a place of rest for the dead," a conception expressed by churches of to-day, which contain tombs within their confines, or are surrounded by a grave-yard.

A radical change in the burial customs of the land is apparent about the time the Semites took possession of the country. Whether they transferred their cemeteries from the environments of the temples to districts outside



A. THE SUMERIAN CREMATORIUM; B. PRE-SARGONIC CURB; C. EARLY VAULTED DRAIN, FIFTH MIL-
LENNIUM, B.C.



SHOWING THE DIFFERENT STRATA IN THE TEMPLE AREA

of the cities is not known. Professor Hilprecht declares that up to the present time it is not known how the Semitic inhabitants of Nippur throughout their history disposed of their dead. The several thousand coffins discovered all belong to the period which followed the Babylonian occupation of the country.

TEMPLE LIBRARY

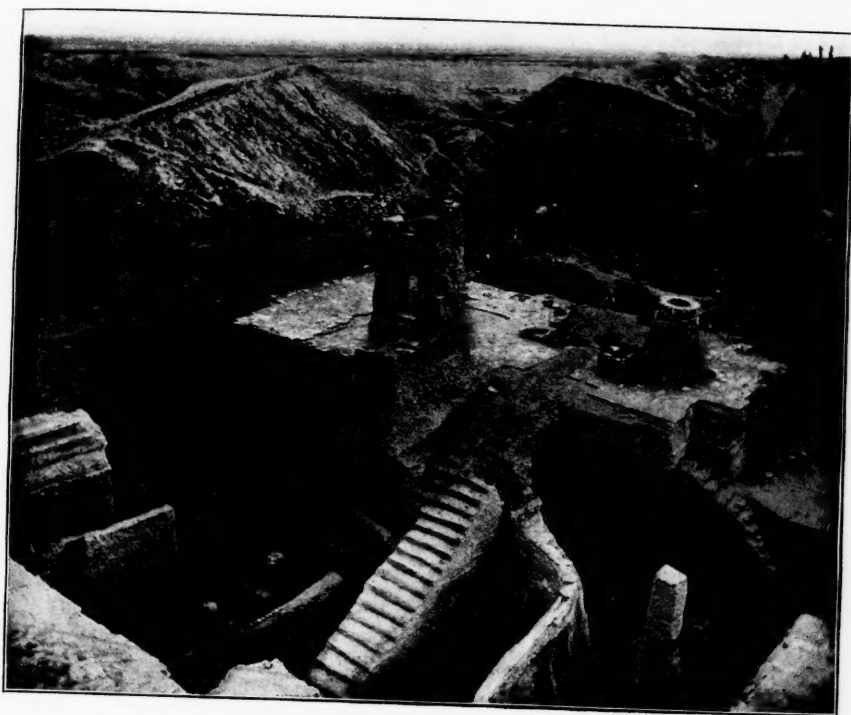
The locating and partial excavating of the famous Temple Library and priest school of Nippur has been pronounced "one of the most far-reaching assyriological discoveries of the whole last century."

It was on the first campaign that Professor Hilprecht in submitting his views on the topography of the northeast half of the ruins, pointed out an isolated hill as containing in all probability the Temple Library. He informs us that he requested the director to let him have 20 men for a few days in order to furnish the inscribed material so eagerly sought for, and adds:

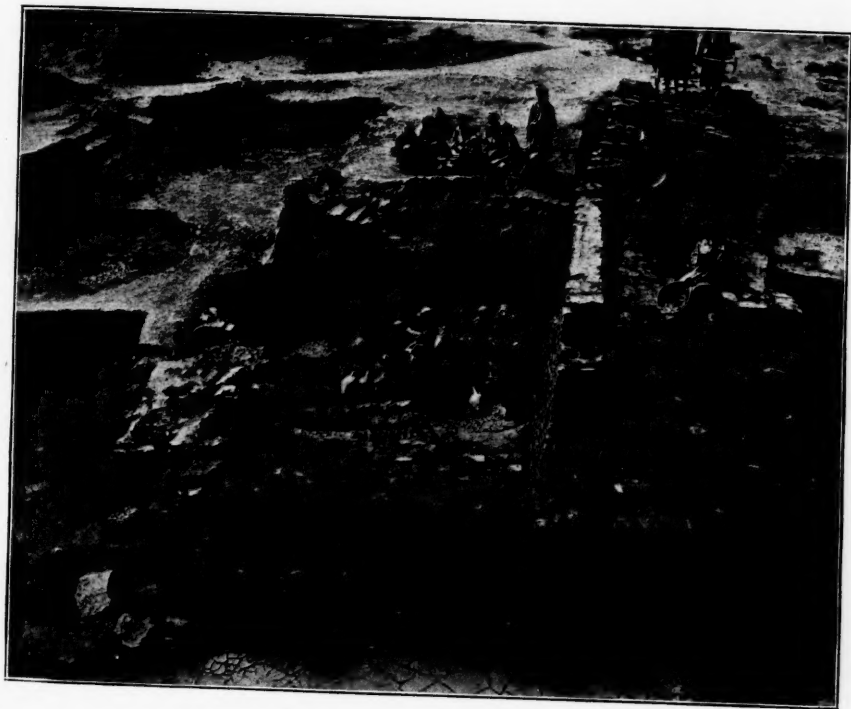
Before noon the first 6 cuneiform tablets were in our possession and at the close of the same day more than 20 tablets and fragments had been recovered. . . . At the end of February several hundred tablets and fragments had been obtained from the same source and 6 weeks later, when our first campaign was brought to a sudden end, the library mound had yielded more than 2,000 cuneiform inscriptions from its seemingly inexhaustible mines. . . . But time and money were now lacking, and other circumstances arose which forced us to evacuate Nuffar before many weeks were over. Otherwise we could not have failed to discover in 1889 those tablet-filled rooms which were unearthed 11 years later, when the writer [Professor Hilprecht] personally was held responsible for the preparation of the plans and the scientific management of the Expedition.

The mound containing the remains of the educational quarters of the city rises to an average height of 20 to 25 feet above the level of the present plain, and covers an area of about 13 acres. In other words, it occupies about the sixth part of the entire site included in the vast temple complex of Bêl on the northeast side of the Chebar. Only about the twelfth part of this library mound has thus far been satisfactorily examined with regard to the ruins lying above the plain level. The upper layer is easily distinguished from those below by the extensive remains of Parthian buildings constructed of the same large kind of unbaked brick which characterizes the two excavated palaces on the temple ruins and on the west bank of the Shatt en-Nil. No important traces of Jewish and early Arabic settlements were disclosed anywhere in this particular mound. Parthian and Sassanian graves abound in the slopes of the entire hill. They were not unfrequently found even in the central part of the ruins, where they are sometimes accompanied by terra-cotta drains and wells descending far into the early Babylonian strata.

More than 4,000 cuneiform tablets had been discovered in the upper 20 feet of accumulated débris at Mound IV during our excavations of 1889 and 1890. They continued to occur in the same irregular manner in those strata also during our latest campaign. Upon closer examination the previously gathered tablets were found to include several hundred contract tablets and temple lists written at the time of the Assyrian, Chaldean and Persian rulers [about 700-400 B.C.], a few fragments of neo-Babylonian hymns, letters and syllabaries; a considerable number of business documents, dated in the reigns of the kings of the first dynasty of Babylon [about 2,300-2,100 B.C.], and more than 2,500 literary fragments of the III pre-Christian Millennium generally half effaced or otherwise damaged. I consequently had reached the conclusion that either there were two distinct libraries buried in "Tablet Hill,"—an earlier more important, and a later comparatively insignificant one lying on the top



EXCAVATIONS IN THE TEMPLE COURT



ABULLU RABU OR THE GREAT CITY GATE OF NIPPUR

of the former,—or that the mound concealed the remains of but one library continuously occupied and repeatedly restored, which contained documents of many periods in the same rooms. For apart from other considerations, the lists of Cassite names and words known from the Qoyunjuk collection, which Ashurbānāpal's scribes doubtless had copied at Nippur for the royal library of Nineveh, proved sufficiently that occasional additions must have been made to the tablets of the earlier library in the long interval of 1,500 or 1,600 years which elapsed between the reign of Hammurabi and that of the last great Assyrian monarch. The fact that by far more ancient documents were unearthed than tablets written in the neo-Babylonian script was in entire accord with what we know of the two great periods to be distinguished in the history of Nippur.

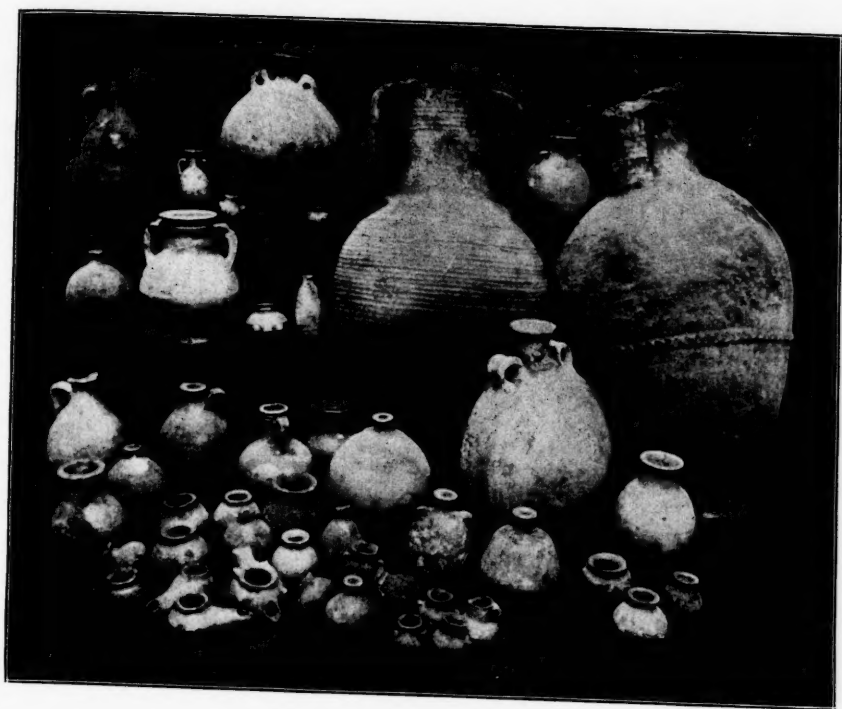
The mere fact that the library unmistakably was allowed to lie in ruins for a considerable length of time points to a great national calamity from which the entire city and the country as a whole likewise suffered for years. We are thus led to a conclusion similar to that at which we arrived when we examined the results of our excavations at the temple mound. The breaking and scattering of so many thousands of priceless documents of the past was an act of gross vandalism on the part of the Elamitic warriors, who invaded and devastated the Babylonian plain about the middle of the III Millennium and played such terrible havoc with the archives and works of art in the court of the ziggurat.

As nearly the whole of the excavated material from the ancient library is literary and scientific in its character, the tablets, with but few exceptions, are unbaked. They consequently have suffered not only from the hands of the Elamites, but also from the humidity of the soil to which they were exposed for more than 4,000 years; from the varying atmospheric conditions after their ultimate rescue, and from the unavoidable effects of long transportation by land and sea. The difficulties of the decipherer are thereby increased enormously, and it will require more than ordinary patience to overcome them and to force those half-effaced crumbling tablets to surrender their long-guarded secrets to our own generation.

There is, however, one circumstance which to a certain degree will reconcile us to the ruthless procedure of those revengeful mountaineers into whose quiet valleys and villages the Babylonian rulers so often had carried death and destruction in the name and 'in the strength of the god Bēl.' Mutilated and damaged as these tablets are, when fully deciphered and interpreted they will afford us a first accurate estimate of the remarkable height of Babylonian civilization, and of the religious conception and scientific accomplishments of a great nation at a period prior to the time when Abraham left his ancestral home in Ur of the Chaldees. They will impart to us knowledge of a fixed early period which the better-preserved copies of the royal library of Nineveh did not convey, and which probably for a long time to come we would have been unable to obtain, had the Temple Library of Nippur not been destroyed by the Elamite hordes [for, as Professor Hilprecht goes on to explain, they were preserved by being buried in the ruins].

UNIVERSITY OF NIPPUR

The character of the northeast wing as a combined library and school was determined immediately after an examination of the contents of the unearthed tablets and fragments. There is a large number of rudely fashioned specimens inscribed in such a naïve and clumsy manner with old-Babylonian characters, that it seems impossible to regard them as anything else but the first awkward attempts at writing by unskilled hands,—so-called school exercises. Those who attended a class evidently had to bring their writing material with them, receiving instruction not only in inscribing and reading cuneiform tablets, but also in shaping them properly, for not a few of the round and rectangular tablets were uninscribed. The contents of these interesting 'scraps' of clay from a Babylonian 'waste basket' are as unique and manifold as their forms are peculiar. They enable us to study the methods of writing and reading, and the way in which a foreign language (Sumerian) was taught in the III pre-Christian Millennium.



POTTERY OF THE DIFFERENT PERIODS



SLIPPER-SHAPED COFFINS IN SITU OF THE PARTHIAN PERIOD

There are also grammatical exercises, exhibiting how the student was instructed in analyzing Sumerian verbal forms, in joining the personal pronouns to different substantives, in forming entire sentences, in translating from the Sumerian into the Semitic dialect of Babylonia and *vice versa*. His preparations look pretty much like those of the modern student who excerpts all the words unknown to him from Caesar's *Gallic Wars* or Xenophon's *Anabasis* for his work in the class room.

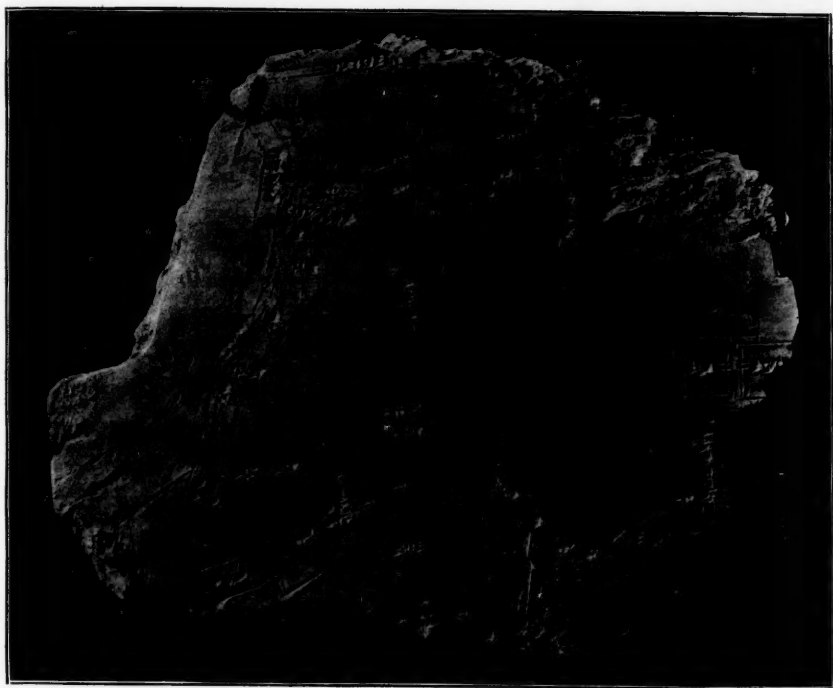
These early Babylonians, who excelled all other ancient nations of the same period in their lofty religious conceptions, in the depth of their sentiment, and in the scientific character of their investigations, did not suffer anything in their schoolrooms that would tend to distract the minds of the pupils and to interfere with their proper occupation. The temple library of ancient Nippur was eminently a place of study and a seat of learning, where the attention of all those who assembled for work was concentrated upon but one subject,—the infusing or acquiring of knowledge. In accordance with an ancient Oriental custom even now universally prevailing in the East,—in the great Mohammedan university of Cairo as well as in the small village schools of Asia Minor,—we should imagine the Babylonian students of the time of Abraham being seated on the floor with crossed legs, respectfully listening to the discourses of the priests, asking questions, practicing writing and calculating on clay tablets, or committing to memory the contents of representative cuneiform texts by repeating them in a moderately loud voice.

The 'books' required for instruction, reference and general reading as a rule were unbaked clay tablets, stored on shelves, or sometimes deposited in jars. The shelves were made either of wood—as ordinarily was the case also in the business houses on the western side of the Chebar—or of clay. These clay ledges were built up in crude bricks to a height of nearly 20 inches from the apparent floor level, and on an average were about $1\frac{1}{2}$ feet wide. Two of the rooms yielded tablets and fragments by the thousands, and are among the largest thus far excavated in 'Tablet Hill.' To preserve the fragile 'books' from dampness, the clay shelves were probably covered with matting or with a coating of bitumen. According to the report of the architects, traces of the last-mentioned material seem to have been disclosed on the ledge of the large hall.

Special attention was paid to counting and calculating. Even instruction in drawing and surveying lessons were offered. There are a few tablets which contain exercises in drawing horizontal and inclined parallel lines, zigzag lines, lines arranged in squares, lozenge forms, latticework and other geometrical figures.

The course in art led gradually up to free-hand drawing from nature, and probably included also lessons in clay modeling and in glyptics and sculpture (seal cylinders, bas-reliefs and statues).

The technical 'books' on the shelves gave all the necessary information on the subjects treated in the school. But they also included more scientific works, tablets for religious edification, and 'books' of reference. To the first-mentioned class belong the many mathematical, astronomical, medical, historical and linguistic tablets recovered; to the second the hymns and prayers, omens and incantations, mythological and astrological texts. Among the books of reference I classify the lists of dates giving the names of kings and the principal event for every year, the multiplication tables, the lists of the different measures of length and capacity, the lists of synonyms, geographical lists of mountains and countries, stones, plants, objects made of wood, etc. It must be borne in mind that thus far only about the twelfth part of the entire library complex has been excavated, and, though it would be useless to speculate as to the exact number of tablets once contained in the temple library, it is certain that whole classes of texts, only sporadically represented among our present collections, must still lie buried somewhere in the large triangular mound to the south of the temple. During our latest campaign we struck principally the rooms in which the mathematical,



PLAN OF THE CITY OF NIPPUR, FOUND IN THE ARCHÆOLOGICAL MUSEUM, VI CENTURY B.C.



EXCAVATIONS IN THE TEMPLE AREA

astronomical, astrological, linguistic, grammatical and certain religious texts had been stored. This fact alone proves that the library was arranged according to subjects and classified according to scientific principles.

BABYLONIAN ARCHÆOLOGICAL MUSEUM

The excavations revealed not only the oldest known sanctuary, library and school, but also the most ancient Archæological Museum. In an upper stratum of the Library mound was unearthed a small Babylonian Museum, the first known in history. The collections were preserved in an earthen jar and consisted of very choice specimens of antiquities. An archæologist of the present day after handling many thousands of objects recovered from the ruin hills of Babylonia is naturally able to judge concerning the real merits of antiquities discovered. This little museum illustrates the fact that the collector, who lived about the time of Belshazzar in the VI Century B.C., had the same high regard for that which would be considered especially valuable by a modern archæologist. Whether the specimens were excavated or purchased we do not know, but however acquired the collector has handed down to his illustrious colleague in the same science very choice antiquities. The earliest inscription of the collection, though somewhat fragmentary, contains the titles of Sargon I, 3,800 B.C., most of which were hitherto unknown. A black stone votive tablet belonging to Ur-Gur, 2,700 B.C., is the next in chronological order, which informs us that the king built the wall of Nippur. The section of the wall excavated revealed bricks with his name and titles.

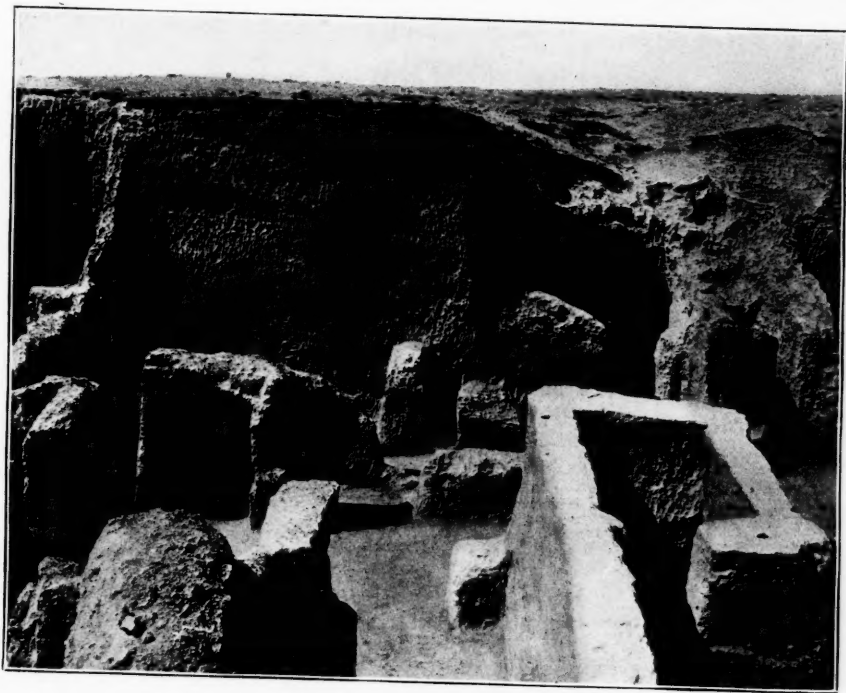
The third object was a terra-cotta brick stamp of Bur-Sin, the first found of this Babylonian ruler. An excellently preserved tablet states that the great hall of the temple was called Emakh, and also, to Professor Hilprecht's surprise, that there were 24 shrines of other gods within the precincts of the temple besides Bêl and his consort Bêltis. The jar also contained tablets dated in the reigns of Marduk-nadin-akhi, a contemporary of Tiglathpileser I and Adad-apal-iddina, 1,060 B.C., the first thus far known; two tablets of great chronological importance inscribed by Ashur-etil-ilani, 625 B.C., and Sin-shar-ishkun; an astronomical tablet giving observations concerning Virgo ad Scorpion, and a large fragmentary plan of the city of Nippur, which will prove of great value in the reconstruction of the ancient city. This little archæological museum has now lost its identity, as it has been consolidated with its modern sister institution, the Archæological Museum of the University of Pennsylvania.

WALLS AND GATES OF NIPPUR

Considerable attention on the last campaign was devoted to a methodical examination of the walls of the city, in order to determine their character, and especially with a view to a better understanding of the extent of the early pre-Sargonic city. *Imgur-Marduk*, the inner wall of the city, or the inclosure of the sacred precincts of the temple, were found deeply hidden below the ruins of later constructions. The interior of the southern wall, which contained the principal gate of the temple, was without any attempts at architectural adornment. Into it a number of store rooms were built. "The monotony of the long exterior surface was relieved by a series of panels." The gate was a very elaborate affair and yet had its origin in the time of Sargon I [3,800 B.C.]. A door socket inscribed by Ur-Gur [2,700



EARLY PRE-SARGONIC TABLET, C. 4,500 B.C.



LIBRARY AND SCHOOL OF NIPPUR

B.C.] had been used over and over until the time of Ashurbânâpal at the level of whose pavement it was found. *Nimit-Marduk*, the outer wall of the city, was plainly visible and could easily be traced through a series of low ridges to the north of the temple. To the east of the sanctuary the task appeared more difficult, and was left to be accomplished in connection with the excavation of the mounds which adjoin toward the temple. Professor Hilprecht is of the opinion that this group of mounds represents "the palace of the patesi (priest king) of Nippur and the houses of the large body of higher priests and temple officers serving immediately under him."

The excavations on the outer face of the wall, especially the pre-Sargonic construction, yielded large quantities of terra-cotta balls and a few small stone eggs. These "are to be regarded as missiles thrown by the slingers of hostile armies attacking the city." Clay was turned into war material, owing to the absence of stone in the alluvial soil of Babylonia. Other weapons found were arrows, spears and axes made of copper, and clubs of stone. Near the base of the outer wall were also found stone weights and mortars, broken statues and reliefs, "some of the oldest fragments of sculptures discovered at Nuffar," doubtless thrown down from the walls by the besieged inhabitants of the city.

In the first half of the III Millennium before Christ, "a row of magazines, booths and closets occupied the space along the inner face of the long wall." In one of the rooms a large kitchen furnace 13 feet long by 7 feet wide and nearly 4 feet high was found. It was built about 2,300 B.C. It consisted of a series of 9 arches, each about $2\frac{1}{2}$ feet wide in the clear. The arches inclosed the fire-box. A roof of tiles over the whole structure converted the spaces between the arches into flues, which connected with another flue extending at right angles to the arches and just alongside of them. This last flue served as a chimney. In another room a jar containing the accounts of a Babylonian shop-keeper about 2,600 B.C. was found.

At a point in the low ridge of hills which represent the ancient wall where nothing above the level of the plain was seen, the remains of a pre-Sargonic gate were found. Only part of its substructure and stepped ascent remained. The gate was divided into three parts, the main roadway in the middle for beasts and vehicles, and an elevated passageway on either side for the people. The central road was about 12 feet wide, or nearly 3 times as wide as each side walk.

These are a few of the many important architectural features and discoveries recorded in Professor Hilprecht's volume *Explorations in Bible Lands*. It contains 4 specially prepared maps and nearly 200 carefully selected illustrations, exhibiting the work and method of the different expeditions in the trenches, the ruined and restored temples and palaces, and the rich archæological material brought to light in the ancient Biblical world during the past century, special attention being given to such antiquities as have a bearing upon the Old Testament.

The authors had the one aim throughout the preparation of the work "to bring the history of the gradual exploration of those distant oriental countries, which formed the significant scene and background of God's dealings with Israel as a nation, more vividly before the educated classes of Christendom."

EDITORIAL NOTES

ORIENTAL EXPLORATIONS: This issue of RECORDS OF THE PAST is devoted to the work of the Babylonian Expedition of the University of Pennsylvania. It is desirable in taking up this great work to give a general outline covering the various campaigns in Babylonia since the inception of the enterprise in 1888. The publication of Dr. Hilprecht's work made it possible to give a general outline of the work to the present time. To Dr. Peters belongs the credit of originating and organizing the most important Expedition in the interest of historical research that has ever been undertaken. His interesting article deals only with the work of the Expedition during the first two campaigns while he was director. The impetus that he gave the work placed it upon a successful foundation and time will only disclose the ultimate results of his persistent determination to uncover the antiquities of the Tigris-Euphrates Valley. To some of the prominent citizens of Philadelphia belong the credit of furnishing the necessary financial aid to successfully prosecute the work. They have set a noble example for the wealthy men of this country to follow.

To Dr. Hilprecht, belongs the credit of carrying on the work so ably begun by Dr. Peters. It could not have fallen into more competent hands. He is without doubt the greatest living assyriologist. It is to him the world is indebted for gathering the fragments recovered from Nippur and other centers of the Tigris-Euphrates Valley and constructing a history of the oldest civilization in the world. His going out with Dr. Peters on the first campaign to Nippur as an assyriologist enabled him to become familiar with every stage of the work and the results thus far obtained. He is not only a profound scholar, but a successful explorer, and when he returns to Nippur in the coming fall the world will have reason to expect still greater disclosures of the past. In his work of translating the documents found and publication of the results of the several campaigns, he has been greatly aided by his accomplished assistant, Prof. Clay. We congratulate the readers of RECORDS OF THE PAST, on the interesting sketch which we present in this issue. It will be followed in March by an elaborately illustrated article by Mr. Fisher, on the Architecture of Nippur. Future articles will deal with other features of the work.

THE EXCAVATION OF GEZER: Mr. R. A. Stuart Macalister under date of January 15, 1903, writes to the London *Athenæum* from Jerusalem concerning the progress of excavation at Gezer as follows: The excavations on the site of Gezer continued steadily from the time when I forwarded my last letter on the subject to the *Athenæum* till last November, when the unfortunate cholera epidemic in the district made it necessary to suspend operations.

The work during the past quarter has been concentrated on the great megalithic temple which had just been revealed when I wrote before, and on the ground in its immediate neighborhood.

The results have been as important as those already discovered. In the first place, the series of troglodyte dwellings of great antiquity, artificially excavated in the rock-summit, have been brought to light. Fragments of ancient pottery and flint weapons have been recovered from them, but so far no intrusive human remains, though I am inclined to correlate

the inhabitants with the deposit of burnt bones found in the buried cave already reported on. I estimate the date of these dwellings at from 2,500 to 3,000 B.C. The lowest stratum of débris is probably contemporary with or slightly later than these rock-hewn dwellings; at any rate, it is to be referred to the same pre-Amorite race.

Above this stratum I have succeeded in identifying five late strata, two of which I refer to the Amorites, two to the pre-Exilic Jewish period, and one to the years immediately following the Exile. The arguments for this chronology are drawn from the pottery and other remains found in each stratum, and in two remarkable details accord in a most interesting manner with the history of Gezer as known from literary sources. During the Amorite period the temple, which has been the center of the work during the quarter, seems to have been an open space, without buildings or erections except the great monoliths. In the beginning of the Jewish period the space was built over, though religious emblems found in profusion in and about Jewish houses show that the place retained its religious character, notwithstanding the change of the dominant religion. This implies that at the commencement of the Jewish period it was necessary to provide for the housing of an increased population within the walls, so that the sacred inclosure had to be encroached upon. Further, the second Jewish city, which is coeval with the monarchy, is much smaller than its immediate predecessor, the whole eastern end of the *tell* being entirely unoccupied by it, showing that a smaller population was contemplated by its builders. The explicit statements of the Hebrew historians, in Joshua xvi. 10 and 1 Kings ix. 16, respectively, to the effect that at the commencement of the Jewish period the Israelites did not drive out the Canaanites, but crowded themselves in among them, and that at the commencement of the monarchy the King of Egypt killed the Canaanites of Gezer (probably reducing the population by half), are apparently reflected in these phenomena of the stratification, and seem to show that we are on safe ground in the chronological principles deduced from pottery.

There still remains a disappointing dearth of inscriptions. A XII Dynasty (?) sepulchral stele, of common type, from the Amorite strata, and a smaller fragment of sandstone with the ring and titles of Niafaut I, from the topmost stratum, both in hieroglyphics, are the only written records yet unearthed, if we except stamped jar-handles with short Hebrew and Greek inscriptions.

The temple consists of: 1. An alignment of 8 monoliths, from 5 to 10 feet in height, with the stumps of two others that have been broken. There is a possibility that one of the monoliths was used as a perch of a stylite priest (such as is described in the *De Dea Syra* of Lucian), and that another was a stone held in special veneration, being clearly polished at the top by the rubbing, anointing, and kissing to which devotees have subjected it. The 3 stone has some cup-and-channel marks on one face. 2. A massive cubical block of stone with a square mortise cut in the upper surface, apparently the socket for receiving the *asher*, a pole which was an essential element of the Canaanite temples. 3. An area of (as yet) uncertain extent, left open (like the Moslem *haram*) in Amorite times. There was then about 1½ feet of soil covering the rock, and this sub-stratum was found to contain a considerable number of large jars with smaller jars in and about them. Within each of the large jars was found the skeleton of a newly born infant, evidently a victim of sacrifice.

